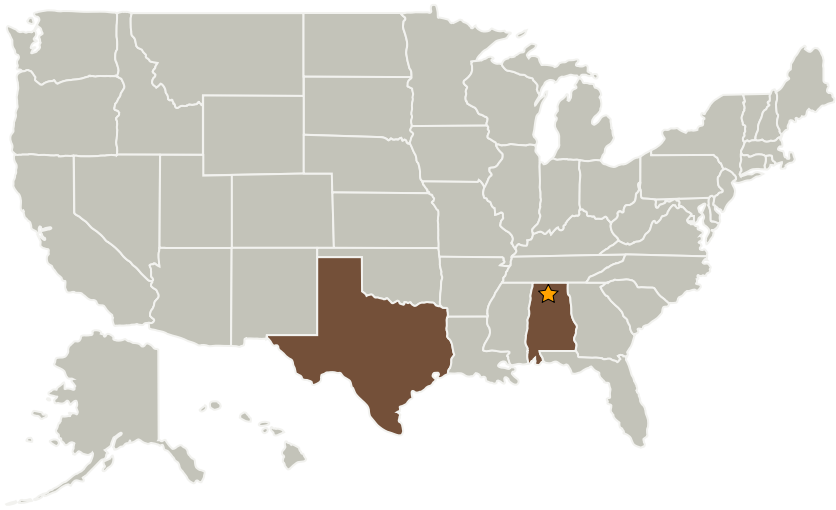
# 3D Print Element

Completed Technology Project (2013 - 2014)

## Project Introduction

To prepare for a future when parts can be printed on demand in space, NASA's Marshall Space Flight Center in Huntsville, Ala., and Made in Space of Mountain View, Calif., have partnered to develop and launch the first 3D printing experiment to the International Space Station. The 3D printing experiment aboard the space station will implement the first device used to manufacture parts in space. The printer uses extrusion additive manufacturing, which builds objects layer by layer out of Acrylonitrile Butadiene Styrene (ABS) plastic, the same material that is used to manufacturea Lego\xa8 brick) and other materials. More than 20 parts will be printed from computer-aided design files loaded on the printer with the ability to uplinked additional files from Earth.

## Primary U.S. Work Locations and Key Partners



| Organizations Performing Work | Role | Type | Location |
|---|---|---|---|
| ★Marshall Space Flight Center(MSFC) | Lead Organization | NASA Center | Huntsville, Alabama |

| Primary U.S. Work Locations | |
|---|---|
| Alabama | Texas |


3D Print Element

## Table of Contents



## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Center / Facility:**

Marshall Space Flight Center (MSFC)

**Responsible Program:**

Game Changing Development

# 3D Print Element

Completed Technology Project (2013 - 2014)

## Project Management

**Program Director:**

Mary J Werkheiser

**Program Manager:**

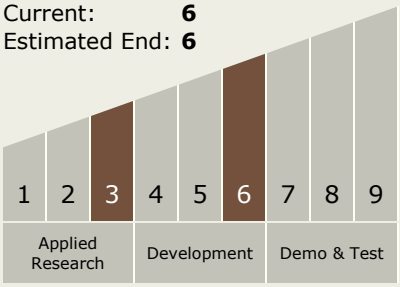
Gary F Meyering

**Principal Investigator:**

John H Vickers

## Technology Maturity (TRL)

Start: **3**
Current: **6**
Estimated End: **6**




## Target Destination

Earth